

## PART TIME VERSUS FULL TIME TEACHING OF DERMATOLOGY, WITH SPECIAL REFERENCE TO RESEARCH\*

S. WILLIAM BECKER, M.D.†

*Chicago*

In his presidential address at the First Annual Meeting of the Society for Investigative Dermatology in 1938, Dr. George M. MacKee (1) stated that one of the main objectives of the organization is to coordinate and correlate investigative work that relates to the skin. Since that time, three presidents, namely Stokes (2), Weidman (3) and Beerman (4) have presented papers discussing investigative problems in dermatology and syphilology.

Having been the proud but uneasy organizer of the first full time University Division of Dermatology at the University of Chicago (5), and its chief for 15 years, and for the past six years Clinical Professor of Dermatology in charge of histopathologic diagnosis at the same institution, in addition to the responsibilities of private practice, it seems timely to survey the present status of dermatologic instruction in the United States to analyze the tendency to full time teaching in our specialty, with special reference to research. A questionnaire was forwarded to the chiefs of university dermatological clinics and to other institutions from which significant research work in our field has been published. No effort was made to separate teaching and publications in dermatology and syphilology. You are all aware of the fact that much, but by no means all, of the work in syphilology is now performed by non-dermatologists, partly in organizations having no direct connection with those devoted to dermatology in medical schools.

Answers were received from 50 medical schools out of 69, all but two of which are associated with universities, and from seven hospitals and clinics, all but two of which have university connections. The questions and answers follow:

### TYPE OF DERMATOLOGICAL TEACHING AT MEDICAL SCHOOLS

Undergraduate.....	50
Graduate.....	30
Internes.....	30
Post-graduate courses.....	11

In addition to the 11 schools which offer post-graduate courses, one teaches only histopathology to post-graduate students, one gives courses to practitioners, one gives courses occasionally, one gives refresher courses and one cooperates with other schools in post-graduate instruction.

\* Presidential address: Read before the Ninth Annual Meeting of the Society for Investigative Dermatology, Chicago, June 20, 1948.

† Section of Dermatology, Department of Medicine, University of Chicago.

## STATUS OF DERMATOLOGICAL CHIEFS

The status of the chiefs of dermatology follows:

Full time.....	2
Full time, shared with Board of Health.....	1
Almost full time.....	1
Geographical full time.....	5
Geographical full time while visiting.....	1
Geographical full time (practically).....	1
Part time.....	39

By "full time" is meant employment by the university on a salary; income from care of patients is collected by the university. Geographical full time signifies a situation in which a physician devotes a varying percentage of his time to teaching, research and the care of clinic patients for a fixed salary, in addition to which he has the privilege of private practice in a university building. In some instances the individual receives all the fees from private patients, in others a percentage is kept by the university for support of a general fund, departmental fund, or for "overhead." Some universities have placed a ceiling on the number of private patients which may be seen by, or on the income of, the geographical full time man, beyond which all money is kept by the institution.

## STATUS OF TRAINED DERMATOLOGISTS

By a "trained dermatologist" is meant one who has completed the three year service required by the American Board of Dermatology as eligibility for the examination given by the Board. The distribution is as follows:

Full time	
Six schools.....	1
Two schools.....	2
Geographical full time	
Six schools.....	1
One school.....	2
One school.....	3
Part time	
Four schools.....	None
Eighteen schools.....	1 to 4
Sixteen schools.....	5 to 9
Six schools.....	10 to 14
Four schools.....	15 to 19
One school.....	20 to 24
One school.....	25 to 30

## NON-MEDICAL STAFF

While the dermatological clinics in all universities have the privilege of consultation with preclinical departments relative to problems in pathology, mycology, etc., several have such workers on their own staffs, as follows:

Fifteen schools.....	1 to 4
Three schools.....	5 to 9
Thirty-two schools.....	Consultants only

## PUBLICATIONS

The number of publications during the year 1947 was as follows:

Nine schools.....	none
Twenty schools.....	1 to 4
Ten schools.....	5 to 9
Four schools.....	10 to 14
Three schools.....	15 to 19
One school.....	20 to 24
Three schools.....	not given

The average number of publications during the last five years is as follows:

Two schools.....	none
Twenty-nine schools.....	1 to 4
Nine schools.....	5 to 9
Three schools.....	10 to 14
One school.....	20 to 24
One school.....	30 to 35
Five schools.....	not given

These figures decrease in value unless many other factors are appreciated. The period of five years includes the latter part of World War II, a time when staffs were of smaller size than usual. Then too, the relation of the number of publications to the number of staff members on duty at one time is also important. The quality and scope of the contributions also vary a great deal.

## PERCENTAGE OF RESEARCH PUBLICATIONS

The estimate of the percentage of research publications is given as follows:

	<i>Per cent</i>
Nine schools.....	zero
Three schools.....	1 to 9
Two schools.....	10 to 19
Four schools.....	20 to 29
Six schools.....	30 to 39
Six schools.....	50 to 59
One school.....	60 to 69
Two schools.....	80 to 89
Two schools.....	90 to 100
Fifteen schools.....	not given

The difficulty in evaluating the quality of publications is reflected by the statement of a university president who facetiously stated that he had placed a faculty member's book on the scales and had weighed it. Judgment of the value of publications varies with developments over the years. It is significant that publications from departments manned by full time chiefs fall in the highest percentage columns.

## STATUS OF INSTITUTIONS

For a comparison with the medical school as a whole, the status of the faculty in the medical school was determined, as follows:

	<i>Schools</i>
Full time chiefs (mostly major depts.).....	23
Geographical full time chiefs (mostly major depts.).....	20
Part time chiefs (mostly minor depts.).....	30
Full time physicians (major depts.).....	18
Geographical full time physicians (major depts.).....	10
Part time physicians (mostly minor depts.).....	29

Contrast of these figures with those for dermatology show that full time and geographical full time chiefs head at least part of the major departments in 43 of 50 medical schools as contrasted with 11 in dermatology. The number of departments with full time or geographical full time heads was not determined, but in several instances, a fifty-fifty split between full time and geographical full time versus part time chiefs was reported. In one instance, only the department of medicine had a full time chief. In several instances, mention was made that development of a completely full time staff was prevented only by financial inability to do so. It may be stated, however, that there is a tendency toward full time and geographical full time chiefs and staffs in dermatology.

#### TENDENCY IN DERMATOLOGY

In order to evaluate the tendencies in dermatology, questions were asked relative to such trends. The following were the answers:

	<i>Schools</i>
To full time chief of staff.....	7
To geographical full time chief.....	10
To full time physicians.....	6
To geographical full time physicians.....	6
Away from full time or geographical full time to part time.....	6

#### TENDENCY IN INSTITUTIONS

The tendency in Medical Schools during the past ten years is as follows:

	<i>Schools</i>
To full time chiefs of staff.....	25
To geographical full time chiefs.....	15
To full time physicians.....	10
To geographical full time physicians.....	11
Away from full time or geographical full time to part time.....	2

#### CLINICS AND HOSPITALS

Several institutions not engaged in undergraduate teaching are outstanding from the point of their research contributions. Many of them are affiliated with medical schools. The Mayo Foundation, affiliated with the Graduate School of the University of Minnesota, is operated on a full time basis and is engaged in teaching on the graduate level. The New York Post Graduate Medical School and Hospital has been the outstanding organization in this country for post-graduate training and has emphasized research endeavors. While it is not at present affiliated with a medical school, negotiations for such affiliation are in progress. The post-graduate courses are at present few in number, and have

been largely supplanted by a systematic three year graduate course of training. The medical staff is on a part time basis. The Minneapolis General Hospital, Mount Sinai Hospital in New York and others have also made substantial contributions of a research nature.

#### COMMENT

The University of Chicago was the first University to establish a medical school in which the clinical branches of medicine are given the same opportunity of developing into productive scientific departments as had been afforded those representing the preclinical branches. It was at first thought necessary to provide part time physicians to head the specialties, but later developments demonstrated that even these minor divisions could be operated on a full time basis. At the end of four years, McLean (6) stated that the conviction as to the desirability of the full time provision had increased rather than diminished. He stated further: "The individual who combines in one person the ideal clinician, teacher, investigator, and scholar is rare indeed, and any attempt to standardize appointments on the basis of equally developed talents in all of these directions is bound to result in mediocrity. For this reason, it becomes necessary to select individuals for their positive qualifications and to make up their deficiencies through the medium of organization."

Allen (7) stated: "Without fear of successful contradiction, it can be stated that most great investigators are at heart teachers. It remains only for the individual and the administration to discover at what level and in what circumstances his teaching can be made effective." He stated further: "Occasionally one meets teachers who are highly regarded by students and yet do not evince much curiosity in attempting to advance the boundaries of knowledge. It is doubtful, however, that such individuals can be truly great teachers, for the reason that they are concerned almost entirely with presenting facts as static material. Since facts keep no better than fish, it is doubtful if such a teacher is capable of instilling the viewpoint that useful knowledge is dynamic and that the question mark looms large in any situation. The ideal combination is the individual who presents the facts in an orderly, logical array and indicates the best acceptable method of dealing with the situation at hand and then attempts to indicate the frontiers." He further stated that there has been a tendency to emphasize research productivity in point of numbers of published articles as an important criterion for appointment and promotion. Stokes (2) stated: "There are now entering the field of dermatology, I believe, individuals who may be capable of exercising truly critical judgment in a limited special field; but I still distrust the ability of the majority who would "do" investigation, to keep out of trouble when using technicians' results, year in and year out."

Wile (8) stated: "From the teacher's standpoint, a lack of a broad foundation in internal medicine is an overwhelming handicap to the intelligent interpretation of cutaneous disease." It seems easier to keep abreast of medical advances in a full time institution.

In speaking of the young investigator, Weidman (3) stated: "The brains of

youth are far more impressionable than later, and this is the time to foster tastes for investigation, particularly in the basic sciences." He further stated: "If we can foment only one out of ten of our future dermatologists into permanent interest in basic science work, our organizational efforts will have been well rewarded, and the *science* of dermatology will progress in the way that we hope for." The full time or geographical full time institutions should assist in this matter.

#### GEOGRAPHICAL FULL TIME

It is my impression that geographical full time is a compromise on the part of a university that is not sufficiently well financed to maintain a full time staff. However, I can see no objection to the arrangement, provided that the proper men are chosen. Geographical full time combines the exposure of the clinician to the stimulus and inspiration of close relation with researchers in preclinical subjects and the opportunity of earning a satisfactory income without the loss of time involved in the usual part time arrangement. It may be that a group of dermatologists, each trained in a separate discipline, cooperating in a geographical full time institution, will offer the best in clinical care, teaching and research.

#### PART TIME DERMATOLOGY

Leon Goldman has discussed the functions of part time workers in dermatology under the title "Service or Servitude," and concludes that such workers bring to the university the perspective that has often been lost by the full time worker.

Stokes stated that a dermatological chief who was willing to spend two-thirds of his time in university work and one-third in private practice could organize a satisfactory department of dermatology.

It must be recognized that the part time worker in dermatology and syphilology has in the past and still is bearing the brunt of clinical care of patients, teaching and research in the United States. The research productivity of some university dermatological clinics has been excellent, often attained at sacrifice of time and income on the part of the chief of the service. Just as part time teachers are being replaced by full time and geographical full time teachers in the major departments of medical schools, there is a tendency in that same direction in the minor specialties, including dermatology.

In my experience, it has been difficult to combine a part time and full time staff on a permanent basis, because of the difference in financial returns.

#### SUMMARY

Thirty-nine out of fifty dermatological clinics teaching undergraduates in medical schools are manned by part time chiefs.

Forty-three of fifty medical schools have full time or geographical full time chiefs in part or all of the major departments.

Forty-six of fifty dermatological clinics avail themselves of the services of part time specialists in dermatology.



Eighteen of fifty dermatological clinics have the services of non-medical individuals (pathologists, mycologists, etc.)

The number of publications varies greatly. The percentage of research publications tends to be higher in the few schools with full time chiefs of dermatology. However, the research productivity of some university dermatologic clinics headed by part time chiefs leaves little room for improvement.

Other institutions, such as the Mayo Clinic, where teaching is carried out on the graduate level by a full time staff, and the New York Post Graduate Medical School and Hospital, which has offered post-graduate courses, but is now converting to three year graduate courses given by a part time staff, have for years carried out excellent dermatologic research.

The interest in science on the part of the chief and his stimulus of younger men to productive research are more important factors in the accomplishments of the organization than the method of administration.

The tendency to establish full time and geographically full time chairs in dermatology lags behind the same trend for the major departments in medical schools, but is gaining.

Cooperation of a group of geographically full time dermatologists, each trained in a separate preclinical discipline, could satisfy all requirements of clinical care, teaching, research and maintenance of income on a satisfactory level.

Post-graduate courses in dermatology, so popular in the past, have been largely replaced by prolonged courses of graduate training designated to satisfy the requirements of the American Board of Dermatology and Syphilology.

#### REFERENCES

- (1) MACKEE, G. M.: Presidential Address at the First Annual Meeting of the Society for Investigative Dermatology, Inc., New York City, April 30th, 1938. *J. Invest. Dermat.* **1**: 235, 1938.
- (2) STOKES, J. H.: Changing causal concepts and investigative methods. *J. Invest. Dermat.* **3**: 257, 1940.
- (3) WEIDMAN, F. D.: The past, present and future in investigative dermatology in the United States. *J. Invest. Dermat.* **6**: 9, 1945.
- (4) BEERMAN, H.: Syphilis as a field of research by the dermatologist. *J. Invest. Dermat.* **9**: 113, 1947.
- (5) BECKER, S. W.: Division of Dermatology. McLean, F. C., and Gorgas, Nellie: Medicine in the Division of Biological Sciences, University of Chicago, Chicago, Illinois, New York, The Rockefeller Foundation, 1931.
- (6) McLEAN, F. C.: Preface to McLean, F. C., and Gorgas, Nellie: Medicine in the Division of Biological Sciences, University of Chicago, Chicago, Illinois, New York, The Rockefeller Foundation, 1931.
- (7) ALLEN, R. B.: Research and medical education. *J. A. Am. M. Coll.*, **14**: 311-316, 1939.
- (8) WILE, U. J.: Dermatologic education, teaching of dermatosyphilology (the educational background). *Arch. Dermat. & Syph.*, **17**: 451 (April) 1928.
- (9) GOLDMAN, L.: Service or Servitude, or the Usual Dilemma of the Part Time Teacher. *J. A. Am. M. Coll.* (to be published).